KARAKTERISTIK KIMIA TANAH DAN KADAR HARA MANGROVE PADA DUA SPESIES MANGROVE DI MUARA SUNGAI BATANG MANGGUNG KOTA PARIAMAN

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ABSTRAK

Ekosistem mangrove Kota Pariaman berada di Kecamatan Pariaman Utara dengan luas sebesar 16,5 ha. Abrasi pantai berdampak pada penurunan kualitas tanah. Penelitian ini bertujuan untuk mengetahui karakteristik kimia tanah dan kadar hara mangrove pada spesies Rhizophora mucronata dan Sonneratia caseolaris yang terdapat di muara Sungai Batang Manggung Desa Apar Kecamatan Pariaman Utara Kota Pariaman. Penelitian ini telah dilakukan pada bulan Juli sampai November 2020. Metode penelitian yang digunakan yaitu metode survei, sampel diambil secara purposive sampling. Sampel tanah diambil secara komposit kedalaman 0 - 30 cm pada setiap spesies mangrove. Parameter yang dianalisis meliputi pH tanah, C-organik, N-total, Kapasitas Tukar Kation (KTK), Basa - basa dan Daya Hantar Listrik (DHL) serta analisis kandunga hara (N, P, K, dan Na) pada daun mangrove. Hasil penelitian menujukkan bahwa karakteristik kimia tanah dan kandungan hara (N, P, K, dan Na) mangrove meliputi reaksi tanah (pH H2O) spesies Rhizophora mucronata memiliki kriteria netral dan agak masam pada spesies Sonneratia caseolaris, C-organik dengan kriteria tinggi (3.61%) pada spesies Rhizophora mucronata dan kriteria sedang (2.81%) pada Sonneratia caseolaris. N-total, Ca-dd dan Mg-dd memiliki kriteria yang sama yaitu rendah pada kedua spesies. KTK dan Na-dd termasuk kriteria sangat tinggi pada kedua spesies serta nilai DHL yang termasuk sedang. Kadar hara daun mangrove memiliki nilai 2.07 - 3.36% N, 0.00 - 0.01% P, 0.01 - 0.02% K, dan 0.03 - 0.07% Na.

Kata kunci: *abrasi pantai, ekosistem mangrove, sifat kimia tanah, hara daun mangrove, spesies mangrove*

SOIL CHEMICAL CHARACTERISTICS AND NUTRIENT LEVELS OF MANGROVE FROM TWO DIFFERENT SPECIES IN ESTUARY OF BATANG MANGGUNG, PARIAMAN CITY

ABSTRACT

The mangrove ecosystem of Kota Pariaman is located in the District of North Pariaman with an area of 16.5 ha. Coastal abrasion has an impact on soil quality degradation. This study was aimed to determine the chemical characteristics of soil and the nutrient content of mangroves from the species Rhizophora mucronata and Sonneratia caseolaris found in the estuary of the Batang Manggung River, Apar Village, Pariaman Utara District, Pariaman City. This research was conducted from July to November 2020. The research method used was a survey method taken by purposive sampling based on the species of the mangrove. At each species, soil samples were taken compositely for 30 cm depth. The parameters analyzed included soil pH, Org-C, Total-N, Cation Exchange Capacity (CEC), Base Saturation and Electrical Conductivity (EC), and analysis of the nutrient (N, P, Na, and K) content of the mangrove leaves. The results showed that there were differences in soil chemical characteristics and leaf nutrients (N, P, K, and Na) of the mangroves. Soil pH of Rhizophora mucronata species was neutral and of Sonneratia caseolaris species was rather acidic in criteria, Org-C was high (3.61%) in Rhizophora mucronata and medium (2.81%) criteria in Sonneratia caseolaris species. Total-N, Ca-exchangeable, and Mg-exchangeable were low in both species. CEC and Na- exchangeable were very high and EC values were medium criteria in both species. The Mangrove leaves contained 2.07 – 3.36% N, 0.00 – 0.01% P, 0.01 – 0.02% K and 0.03 – 0.07% Na.

Keywords:*coastal abrasion, mangrove ecosystem, mangrove leaf nutrient content, mangrove species, soil chemical properties*